

Work Order ID 81798

81798

Page 1

March-19-12 1:33:07 PM

Item ID: D4308-042

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Step, RH Crew

Start Date: 19/03/2012 Start Qty: 4.00

4

Cust Item ID:

Required Date: 18/05/2012 Req'd Qty: 4.00

4

Customer:

Reference:

Approvals: Process Plan: MLJ

Date: 12/03/19

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr

Revision Nbr

D4308

A

100

0.00

100

Large Fab

Large Fab

Memo

0.00

Large Fab

1-Cut D4308-1 using D2622 extrusion as per Dwg D4308
2-Drill, c/sink one hole on top of step as per dwg
3-Deburr and bevel ends for welding

Ac 12.03.28

(x4)

110

QC6- Inspect dimensions to drawing

0.00

110

QC

Memo

0.00

Quality Control

AD 12.04.03

(4)

120

Weld per dwg A/R Aluminum rod Batch: *119135*
Large Fab *120169*

0.00

120

Large Fab

Memo

0.00

Large Fab

1-Weld end cap (ONE END ONLY)
2-Grind end cap welds flush
3-weld lugs as per Dwg D4308

Ac 12.04.03

Ac 12.04.04

4

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Page 2

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Item ID: D4308-042

Accept

N900040100

Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Step, RH Crew

Start Date: 19/03/2012 Start Qty: 4.00

4

Cust Item ID:

Required Date: 18/05/2012 Req'd Qty: 4.00

4

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	QC9- Inspect visual per QSI004- Fusion Welds	0.00							
130						<i>x4</i>	<i>0</i>	<i>BE 12/04/04</i>	
QC	Memo	0.00							
Quality Control									
140	QC5- Inspect part completeness to step on W/O	0.00							
140						<i>(x4)</i>			
QC	Memo	0.00				<i>-217</i>			
Quality Control									
150	Chemical Conversion Coat per QSI005 4.1	0.00							
150									
HandFinish	Memo	0.00							
Hand Finishing									

4 BE 124-5

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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81798

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N900040100

Setup Start *NS1*

Stop *NS2*

4

Cust Item ID:

4

Customer:

Reference:

Run Start *NR1*

Tooling:

Date:

Stop *NR2*

SPC (Y/N):

Date:

**Insp.
Stamp**

0.00

160

QC

Memo

0.00

Quality Control

Weld per dwg A/R Aluminum rod Batch: 119185 0.00

0.00

170

Large Fab

Large Fab

Memo

0.00

Large Fab

- 1-Inspect for foreign object per QSI 024
- 2-Weld Remaining end cap as per Dwg D4308
- 3-Grind end cap weld flush as per dwg D2841
- 4- install rivert as per dwg

QC10- Inspect visual per QSI004- ground welds	0.00
---	------

0.00

180

QC

Memo

0.00

Quality Control

Dart Aerospace Ltd

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March-19-12 1:33:07 PM

Item ID: D4308-042 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Step, RH Crew
 Start Date: 19/03/2012 Start Qty: 4.00 ***4*** Cust Item ID:
 Required Date: 18/05/2012 Req'd Qty: 4.00 ***4*** Customer:
 Reference:

Approvals: Process Plan: Date: Tooling: Date: Run Start ***NR1***
 QC: Date: SPC (Y/N): Date: Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
190 *190* QC Quality Control	QC5- Inspect part completeness to step on W/O Memo	0.00 0.00							<i>EO</i> <i>RH</i>
200 *200* HandFinish Hand Finishing	Chemical Conversion Coat per QSI005 4.1 Memo	0.00 0.00							<i>H</i> <i>BL</i> <i>12-4-11</i>
205 *205* SprayPaint Spray Painting	Spray Painting per QSI005 4.2 Memo PRIME B <i>117319</i> DELFLEET BLUE B <i>120149</i> CLEAR DELFLEET B <i>118093</i>	0.00 0.00							<i>AB</i> <i>12-4-17</i> <i>(4)</i>

Dart Aerospace Ltd

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March-19-12 1:33:07 PM

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 Start Date: 19/03/2012 Start Qty: 4.00 ***4*** Cust Item ID:
 Required Date: 18/05/2012 Req'd Qty: 4.00 ***4*** Customer:
 Reference:

Approvals: Process Plan: Date: Tooling: Date: Run Start ***NR1***
 QC: Date: SPC (Y/N): Date: Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
212	QC14- Inspect Spray Paint	0.00							
212									
QC	Memo	0.00							
Quality Control									
215	Wing Walk as per dwg QS1005 4.4 Batch <u>20902</u>	0.00							
215									
HandFinish	Memo	0.00							
Hand Finishing									
220	QC3- Inspect Part Finish	0.00							
220									
QC	Memo	0.00							
Quality Control									

(Handwritten: 4) 12-04-20

H φ 12-4-20

426 φ 12-4-20

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
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Work Order ID 81798***81798***

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N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Step, RH Crew

Start Date: 19/03/2012 Start Qty: 4.00

4

Cust Item ID:

Required Date: 18/05/2012 Req'd Qty: 4.00

4

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

230

Identify as per dwg & Stock Location: 420

0.00

230

Packaging

Memo

0.00

Packaging

240

QC21- Final Inspection - Work Order Release

0.00

240

QC

Memo

0.00

Quality Control

12/4/23
12-04-23

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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Picklist Print

March-19-12 1:33:11 PM

Page 1

Work Order ID: 81798

81798

Parent Item: D4308-042

D4308-042

Parent Item Name: Step, RH Crew

Start Date: 19/03/2012

Required Date: 18/05/2012

Start Qty: 4.00

Required Qty: 4.00

Comments: IPP Rev:A 11.01.07 new issue DD verf:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D2622-120C		Manufactured	No			100	Each	68.7300	0.05	0.2			

D2622-120C

Step Extrusion

**

Ac 12.03.28

Location	Loc Qty	Loc Code
HALL	16.37	
46910	2	
64409	6	
66970	7.7	
68293	0.25	
72131	0.42	
WA013	52.36	
75781	2.4	
77612	49.96	

D2734

Manufactured No

120

Each

109.0000

1

4

D2734

Step End Plate

**

Ac 12.04.03

Location	Loc Qty	Loc Code
WA	109	
76985	49	
80682	60	

D3458-1

Manufactured No

120

Each

11.0000

1

D3458-1

Step Mounting Plate

**

Ac 12.04.03

Location	Loc Qty	Loc Code
WA002	10	
75609	10	
WA018	1	
63075	1	

4

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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NOTE: Date & initial all entries

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Picklist Print

March-19-12 1:33:11 PM

Page 2

Work Order ID: 81798

81798

Parent Item: D4308-042

D4308-042

Parent Item Name: Step, RH Crew

Start Date: 19/03/2012

Required Date: 18/05/2012

Start Qty: 4.00

Required Qty: 4.00

D3458-3

Manufactured No

120

Each

21.0000

1

4

**

12.04.03

D3458-3

Step Mounting Plate

Location

Loc Qty

Loc Code

WA002

21

75610

21

4

D2734

Manufactured No

170

Each

109.0000

1

4

**

12.04.03

D2734

Step End Plate

Location

Loc Qty

Loc Code

WA

109

76985

49

80682

60

4

MS20601-AD4W2

Purchased

No

170

Each

73.0000

1

4

**

12.04.10

MS20601-AD4W2

Rivet

Location

Loc Qty

Loc Code

ST322

73

12/253

119232

73

4

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

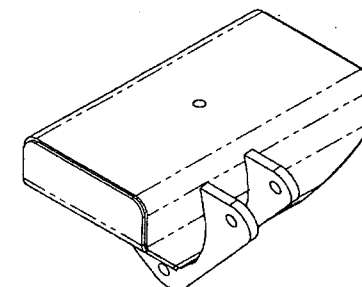
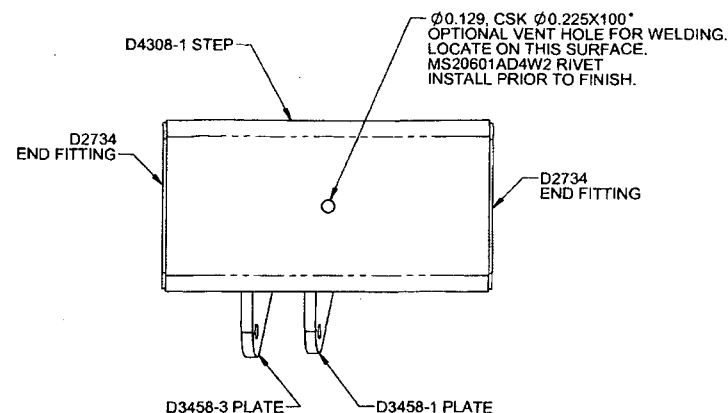
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

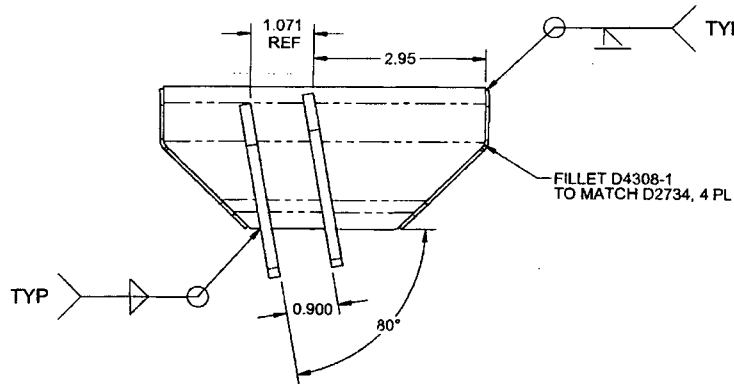
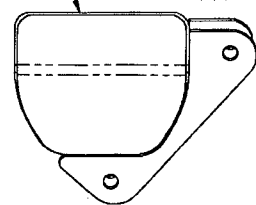
NOTE: Date & initial all entries

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ITEM	QTY	P/N	DESCRIPTION
1	X	D4308-041	STEP, LH CREW
2	1	D4308-1	STEP
3	2	D2734	END PLATE
4	1	D3458-1	PLATE
5	1	D3458-3	PLATE
6	1	MS20601AD4W2	RIVET (OPTIONAL)



2 APPLY BLACK ANTI-SKID ON TOP SURFACE TO BOTTOM OF TOP RADIUS



D4308-041 STEP, LH CREW

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 81798

RELEASED
2011-05-26
JWP

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT "WHITE" (4.3.5.1) PER DART QSI 005 4.3
BLACK ANTI-SKID PAINT PER DART QSI 005 4.4
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: P/N & B/N PER DART QSI 044 6.6 (REMOVABLE TAG)
- 7) WEIGHT: 0.47 lb
- 8) WELDING: PER DART QSI 004

REV.	NEW ISSUE	DESCRIPTION	CP	10.12.17
DESIGN			BY	DATE
DRAWN				
CHECKED				
MFG. APPR.				
APPROVED				
DE APPR.				
DATE	10.12.17			

DART AEROSPACE LTD
HAWKESBURY, ONTARIO, CANADA

DRAWING NO. **D4308** REV. A
SHEET 1 OF 3
TITLE **STEP, CREW** SCALE NTS

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Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

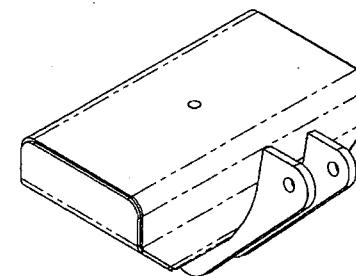
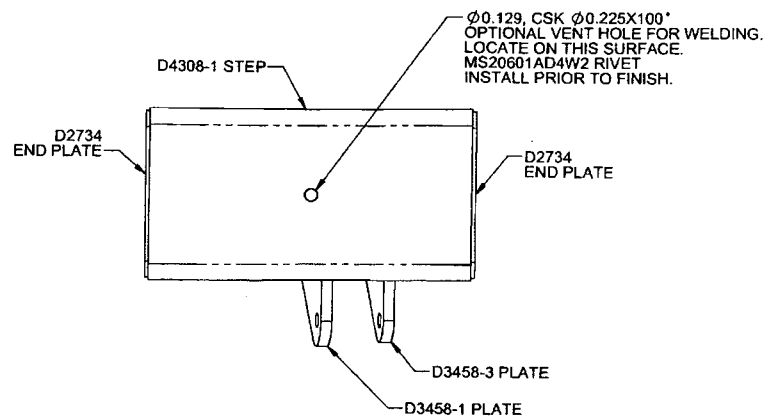
Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
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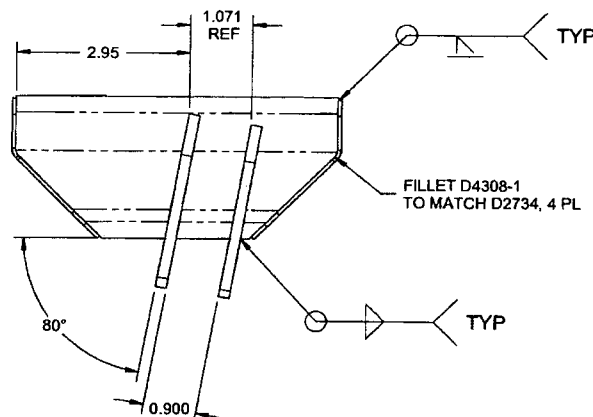
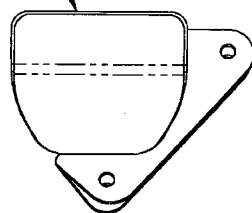
NOTE: Date & initial all entries

81798

ITEM	QTY -042	P/N	DESCRIPTION
1	X	D4308-042	STEP, RH CREW
2	1	D4308-1	STEP
3	2	D2734	END PLATE
4	1	D3458-1	PLATE
5	1	D3458-3	PLATE
6	1	MS20601AD4W2	RIVET (OPTIONAL)



2) APPLY BLACK ANTI-SKID ON TOP SURFACE TO BOTTOM OF TOP RADIUS



D4308-042 STEP, RH CREW

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT "WHITE" (4.3.5.1) PER DART QSI 005 4.3
BLACK ANTI-SKID PAINT PER DART QSI 005 4.4
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: P/N & B/N PER DART QSI 044 6.6 (REMOVABLE TAG)
- 7) WEIGHT: 0.47 lbs
- 8) WELDING: PER DART QSI 004

RELEASED
2011-05-24
AM

DESIGN		DART AEROSPACE LTD
DRAWN		HAWKESBURY, ONTARIO, CANADA
CHECKED		DRAWING NO. D4308 REV. A
MFG. APPR.		SHEET 2 OF 3
APPROVED		TITLE STEP, CREW SCALE
DE APPR.		NTS
DATE	10.12.17	COPYRIGHT © 2010 BY DART AEROSPACE LTD

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Dart Aerospace Ltd

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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

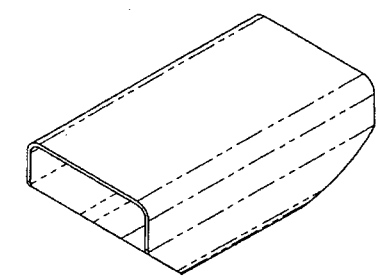
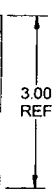
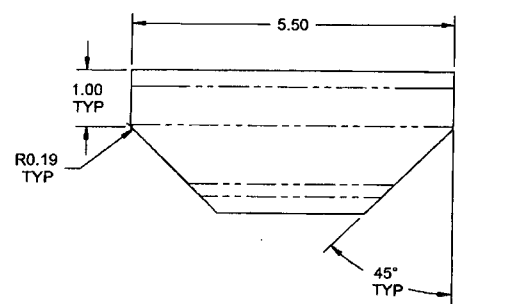
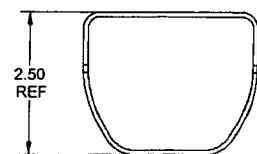
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81798



D4308-1 STEP

RELEASED
2011-05-26
JMD

- NOTES:**
- 1) MATERIAL: MAKE FROM D2622 EXTRUSION
 - 2) FINISH: NONE
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: NONE
 - 7) WEIGHT: 0.33 lbs

DESIGN	g	DART AEROSPACE LTD	
DRAWN	g	HAWKESBURY, ONTARIO, CANADA	
CHECKED	ASS	DRAWING NO.	REV. A
MFG. APPR.		D4308	SHEET 3 OF 3
APPROVED	JMD	TITLE	SCALE
DE APPR.		STEP, CREW	NTS
DATE	10.12.17	<small>COPYRIGHT © 2010 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>	

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